

ABSTRACT OF THE DISCLOSURE

A gas turbine installation which includes a compressor which compresses supplied air and discharges the same, a combustor which combusts the compressed air obtained from the compressor and fuel and produces combustion gas, a turbine which is driven by combustion gas provided from the combustor, a regenerative heat exchanger which heats all or a part of the compressed air being supplied from the compressor to the combustor by making use of the heat of the exhaust gas exhausted from the turbine and a plurality of water spraying devices which are provided at positions from an intake air chamber of the compressor to the outlet of low temperature side gas flow passage in the regenerative heat exchanger and is characterized in that the regenerative heat exchanger is constituted by connecting in series a plurality of heat exchangers having different heat transfer surface configurations. Thereby, a gas turbine installation is provided which suppresses generation of erosion and scales due to water droplets and shows a high efficiency and a high output.